

WHAT IS CLAIMED IS:

1. A door for a refrigerator in which a direction of opening and/or closing the door can be selectively changed, comprising:
 - 5 an external plate which defines at least a front appearance of the door;
 - a door liner which defines a rear appearance of the door and constitutes a space with an insulating layer formed therein in cooperation with the external plate;
 - a dispenser which is installed at a front surface of the external plate for dispensing water to the outside of the refrigerator;
 - 10 tube passages which pass through the insulating layer and allow the dispenser and through-holes for hinge installation located at both sides of the door to communicate with each other;
 - a door side tube structure which is installed in at least one of the tube passages and transfers water from a main body of the refrigerator to the dispenser; and
 - 15 a power cable which extends from the dispenser to the respective through-holes and through which electrical signals are transmitted between the door and the main body of the refrigerator.
2. The door as claimed in claim 1, further comprising decoration caps serving as a
20 finishing trim at both upper and lower ends of the door, wherein wiring chambers for accommodating a tip end of the power cable therein are formed in the respective decoration caps at locations adjacent to the through-holes.
3. The door as claimed in claim 2, wherein each of the wiring chambers is covered
25 with a removable cover.
4. The door as claimed in claim 2, wherein the wiring chamber is formed to have a predetermined space defined by inwardly depressing the decoration cap.
- 30 5. The door as claimed in claim 3, wherein the wiring chamber is formed with a neck

portion that is relatively narrower than other portions thereof, and the cover for covering the wiring chamber is formed with a neck portion corresponding to the neck portion of the wiring chamber.

5 6. The door as claimed in claim 2, wherein a hook for catching and fastening the power cable is formed to protrude from a bottom surface of the wiring chamber.

7. The door as claimed in claim 1, wherein the door side tube structure and the power cable are installed through the tube passage.

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8. The door as claimed in claim 1, wherein the door side tube structure and the power cable are installed in the insulating layer.

9. A door for a refrigerator in which a direction of opening and/or closing the door
15 can be selectively changed, comprising:

an external plate which defines at least a front appearance of the door;

a door liner which defines a rear appearance of the door and constitutes a space with an insulating layer formed therein in cooperation with the external plate;

20 decoration caps which are provided at both upper and lower ends of the door and formed with through-holes for hinge installation at at least opposite sides of the decoration cap;

a dispenser which is installed at a front surface of the external plate for dispensing water to the outside of the refrigerator;

25 a door side tube structure which passes through the insulating layer and allow the dispenser and the through-holes to communicate with each other; and

a power cable which is installed in the insulating layer to extend from the dispenser to the respective through-holes and through which electrical signals are transmitted between the door and the main body of the refrigerator.

30 10. The door as claimed in claim 9, wherein wiring chambers for accommodating a tip

end of the power cable therein are formed in the respective decoration caps adjacent to the through-holes.

11. The door as claimed in claim 10, wherein each of the wiring chambers is covered
5 with a removable cover and a hook for catching and fastening a portion of the power cable is formed in the wiring chamber.

12. The door as claimed in claim 11, wherein the wiring chamber is formed with a
10 neck portion that is relatively narrower than other portions thereof, and the cover for covering the wiring chamber is formed with a neck portion corresponding to the neck portion of the wiring chamber.

13. The door as claimed in claim 10, wherein a hook for catching and fastening the
15 power cable is formed to protrude from a bottom surface of the wiring chamber.

14. The door as claimed in claim 10, wherein the door side tube structure is securely
arranged in a tube passage formed in the insulating layer.

15. A door for a refrigerator in which a direction of opening and/or closing the door
20 can be selectively changed, comprising:

an external plate which defines at least a front appearance of the door;

a door liner which defines a rear appearance of the door and constitutes a space
with an insulating layer formed therein in cooperation with the external plate;

25 decoration caps which are provided at both upper and lower ends of the door and formed with through-holes for hinge installation at least opposite sides of the decoration cap, having wiring chambers formed in the respective decoration caps adjacent to the through-holes; and

at least two power cable which are installed in the insulating layer to extend from
the external plate to the respective through-holes, a tip end of the power cable are
30 accommodated the wiring chambers and through which electrical signals are transmitted

between the door and the main body of the refrigerator.

16. The door as claimed in claim 15, further comprising a dispenser which is installed at a front surface of the external plate for dispensing water to the outside of the refrigerator and
5 a door side tube structure which passes through the insulating layer and allow the dispenser and the through-holes to communicate with each other.

17. The door as claimed in claim 16, wherein the door side tube structure is securely
10 arranged in a tube passage formed in the insulating layer.

18. The door as claimed in claim 15, wherein each of the wiring chambers is covered with a removable cover and a hook for catching and fastening a portion of the power cable is formed in the wiring chamber.